

## REMARKS

Reconsideration of the patentability of the claims of the instant patent application as amended augmented above is solicited.

The examiner's Advisory Action dated August 6, 2003 has been very helpful in attempting to resolve the issues in this application. In addition, two telephone interviews with the examiner were most helpful in furthering the prosecution of the instant patent application.

In response to the comments in this Advisory Action as well as by telephone, applicants have amended claim 1 in this application to recite that the vaccine utilizes at least one of the 17 sequences that have been set forth in this specification. It is believed that the addition of this limitation to the claims of this application should put all of the finally rejected claims in condition for allowance. Therefore, it is urged that the examiner enter this amendment and pass this application to issue.

The examiner's comments concerning the comparisons of sequences referred to in the prior art has been considered. It is appreciated that the Patent Office does not have the resources to do experiments and carry out comparisons. Nothing in the prosecution of this application should be taken as a suggestion that the Patent Office do these things. However, it should be appreciated that, on occasion, applicants are also at a substantial disadvantage to produce the data that the Patent Office would like to see in evaluating the patentability of the instant invention.

The examiner has repeatedly pointed out that the basis for the outstanding rejection is the disclosure of the cited Lin et al. 1997 reference, not the Clark et al. 1992 reference. It should be appreciated that the Lin et al. 1997 reference does not disclose a sequence. Therefore, it is impossible to make the comparison suggested by the examiner. Applicants simply do not know, as an absolute certainty, what sequence was intended to be disclosed by Lin et al. in their 1997 article. Because it is impossible to know with any degree of certainty what sequence Lin et al. used in

1997, applicants have tried to do the next best thing, that is to search the literature and try to reason to a logical conclusion exactly what sequence Lin et al. used.

The reference being relied on by the examiner is merely an abstract. The abstracted paper was apparently not published, or at least could not be found with a reasonably diligent effort. There is an earlier Lin et al. publication (J. Protozool., 39 (4) 457-463 (1992)), but it too did not disclose any specific sequence that could be reproduced so as to make the direct comparison that the examiner is seeking. It is to be noted that Lin and Clark both worked in the same group, that is the Department of Medical Microbiology, University of Georgia, Athens, Georgia, USA. Both publications reported on work supported by the same research grant. While it is recognized that there is no absolute proof that the same sequence was used in all of the work reported by Lin et al. as well as by his co-workers Clark et al., it is logical that the same sequence was used in all of the reported work.

During the telephone conferences that have been mentioned above, the examiner indicated that amending the finally rejected claims to insert a limitation to the SEQ. ID Nos. would raise a new issue that had not previously been considered by the examiner, and that such a new issue would require a further search. For these reasons, the examiner indicated that she would not enter an amendment introducing specific sequences into the instant claims.

It is urged that the examiner carefully reconsider her position in this regard. It is pointed out that two of the original claims were directed to specific sequences. As such, they should have been subject to search. A search for the specific sequences originally claims, 1 and 3, should have turned up any prior art that would apply to any of the sequences set forth herein and now being claimed as limitations on the material of the claimed vaccine. Therefore, the instant amendment does not present new issues and should be entered. As there is no prior art regarding the instant claimed sequences, all claims should now be found to be allowable.

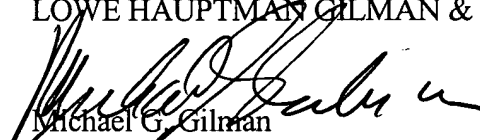
It is recognized that this application is under final rejection, and that the instant paper is being filed during the first month's extension of the response date. It is therefore also recognized

that the examiner may not enter the instant amendment despite the arguments presented above that urge entry. Therefore, there is also being filed herewith a request to convert the instant application into a Continued Prosecution Application (CPA). The entry of this request and establishment of a CPA is to be considered **contingent** upon the examiner's refusal to enter the instant amendments. If the examiner enters these amendments, the attached request for a CPA should be disregarded. If the examiner refuses entry of these amendments, the attached request for a CPA should be honored and the cost thereof charged to the undersigned attorneys' deposit account 07-1337.

It is requested that the examiner advise the undersigned attorney, by a further advisory action, whether the instant amendment will be entered or whether the CPA will be established.

Respectfully submitted

LOWE HAUPTMAN GILMAN & BERNER, LLP

  
Michael G. Gilman  
Registration No 19,114  
Attorney for the applicants

Enclosure: CPA documents

1700 Diagonal Road  
Suite 300  
Alexandria, VA 22314

Voice 703 684 1111  
FAX 703 518 5499

Docket No.: 1459-011

September 4, 2003

MGG/vgg